



# NBJ-190P

POLY CRYSTALLINE MODULES

170-190Watt

## KEY FEATURES

- ✧ We use high conversion efficiency solar cells to ensure high quality
- ✧ Our High performance modules have an industry low tolerance of 0~+3%
- ✧ Entire modules can withstand high wind loads(2400 Pascal), snow loads(5400 Pascal) and extreme temperature
- ✧ Passed IEC 5400 Pa mechanical loading test.

## QUALITY & SAFETY

- ▲ Certificate: CE, IEC, TUV, CEC, ISO
- ▲ Industry power output warranty: 90% in 12 years, 80% in 30 years
- ▲ 10-year warranty on product material and processing technology
- ▲ ISO 9001:2008(Quality Management System) certified factory
- ▲ IEC 61215、IEC61730 certified products



## APPLICATION



On-grid residential roof-tops



On-grid commercial/  
industrial roof-tops

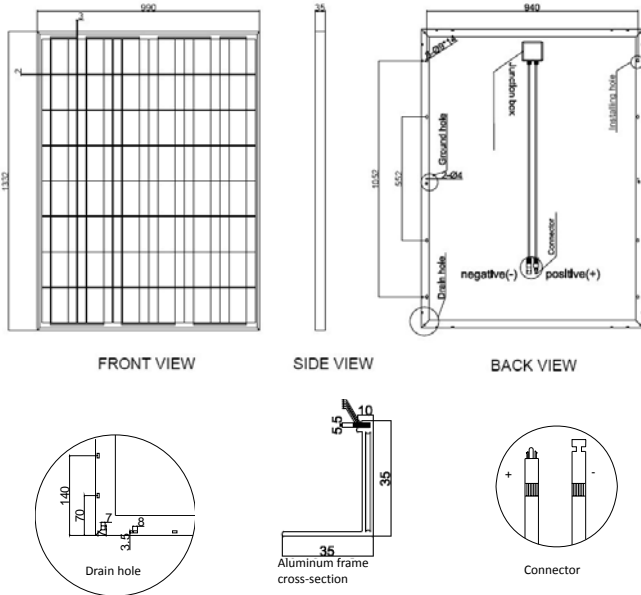


Solar Power plants

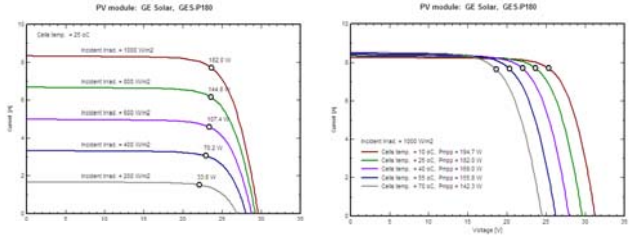


Off-grid systems

## Engineering Drawing



## I-V Curve



## Mechanical Characteristics

Cell Type	Poly Crystalline 156×156mm(6 inch)
No. of Cells	48(6×8)
Dimension	1332×990×35mm
Weight	12.5kg
Front Glass	3.2mm, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminum Alloy Type 6063-T5
Junction Box	IP 65 Rated (Black)
Output Cables	TUV 1×4mm <sup>2</sup> , length:900mm
Connector	MC4(UV resistance and self-locking/IP67)
Encapsulation Material	EVA(0.50±0.03mm thickness)
Back Foil	White TPT(0.32±0.03mm thickness)
Fixing Adhesive	Silicone Sealant(White)

## Packing Configuration

Q'ty/Pallet,	1×20'ft	1×40'GP	1×40'HQ
Pallet Q'ty	8pallets	17pallets	17 pallets
Q'ty/Container	352pcs	748pcs	816pcs

## SPECIFICATIONS

Module Type	NBJ-170P	NBJ-175P	NBJ-180P	NBJ-185P	NBJ-190P
Maximum Power at STC (Pmax)	170Wp	175Wp	180Wp	185Wp	190Wp
Maximum Power Voltage (Vmp)	24.00V	24.09V	24.24V	24.30V	24.36V
Maximum Power Current (Imp)	7.09A	7.27A	7.43A	7.62A	7.80A
Open-circuit Voltage (Voc)	29.23V	29.23V	29.32V	29.57V	29.80V
Short-circuit Current (Isc)	7.58A	7.77A	7.95A	8.14A	8.34A
Cell Efficiency (%)	14.9%	15.2%	15.7%	16%	16.6%
Module Efficiency (%)	12.9%	13.2%	13.7%	13.9%	14.4%
Operating Temperature(°C )	-40°C ~+90°C				
Maximum System Voltage(V)	DC 1000V(TUV) / DC600V(UL)				
Maximum Rated Current Series(A)	12A				
Power Tolerance	0~+3%				
Temperature Coefficients of Pmax	(-0.45±0.05)%/°C				
Temperature Coefficients of Voc	(0.05±0.01) %/°C				
Temperature Coefficients of Isc	(-0.35±0.02)%/°C				
NOTC(°C )	(47±2)°C				

STC: Irradiance 1000W/M<sup>2</sup>    Module Temperature: 25°C    AM=1.5